ABSTRACT OF THE DISCLOSURE

An implanted medical device (e.g. infusion pump) and external device communicate with one another via telemetry wherein messages are transmitted under a robust communication protocol. The communication protocol gives enhanced assurance concerning the integrity of messages that impact medical operations of the implantable device. Messages are transmitted using a multipart format that includes a preamble, a frame sync, a telemetry ID, data, and a validation code. The data portion of the message includes an op-code that dictates various other elements that form part of the message. The data portion may also include additional elements such as sequence numbers, bolus numbers, and duplicate data elements. A telemetry ID for the transmitting device may be implicitly embedded in the message as part of the validation code that is sent with the message and that must be pre-known by the receiver to confirm the integrity of the received message.